

INTEGRATED METAL-INSULATOR-METAL CAPACITOR AND METAL GATE TRANSISTOR

ABSTRACT

An integrated circuit structure is disclosed that comprises a pair of capacitors, each having metal plates separated by an insulator, and metal gate semiconductor transistors electrically connected to the capacitors. The metal gate of the transistors and one of the metal plates of each of the capacitors comprise the same metal level in the integrated circuit structure. More specifically, each of the capacitors comprise a vertical capacitor having an upper metal plate vertically over a lower metal plate and each metal gate of the transistors and each upper metal plate of the capacitors comprise the same metal level in the integrated circuit structure.